

ABSTRACT

This application relates to the field of holding arrangements and more particularly to the field of arrangements for holding a particle beam apparatus such as a transmission electron microscope. Described herein is an arrangement being sufficient for receiving a good resolution in the area of 1 Å or less, said arrangement still being under more or less no influence of the environment, in particular, building vibrations. In one embodiment, the arrangement comprises a base structure comprising a plurality of hollow bodies, at least one of said hollow bodies having a first length extension in a first direction, a second length extension in a second direction and a third length extension in a third direction, said length extension in said first direction being larger than said length extensions in said second and third directions, and wherein a cross section of said at least one of said hollow bodies perpendicular to said first direction is substantially triangular. Due to the hollow body shape, a very stiff structure is provided with a very good eigenfrequency. Thus, the foregoing is very insensitive with respect to mechanical excitations, especially building vibrations when holding a particle beam apparatus. Furthermore, the foregoing allows a hanging column approach by supporting the column of a particle beam apparatus close to or above the centre of gravity.